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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,378	11/21/2003	Rui-Zhi Huang	DF-03300	3603

7590 10/25/2005  
Haverstock & Owens LLP  
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EXAMINER

HAYES, BRET C

ART UNIT	PAPER NUMBER
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3644

DATE MAILED: 10/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/719,378

Applicant(s)

HUANG ET AL.

Examiner

Bret C. Hayes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 29 JUL 05 have been fully considered but they are not persuasive. Examiner has responded to at least the main points of the arguments in the body of the rejections to follow.

### *Claim Rejections - 35 USC § 102*

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 16, 20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 3,940,884 to Mason, Jr. (*Mason*).

4. Re – claim 16, Mason discloses the claimed invention including a weed-preventing paper for cultivating a plant 3, comprising: a paper\* body 1 covering a surface of a soil where said plant 3 is to be grown, and having at least two cross openings, as at junction of cuts 10 and 11 in Figs. 2 and 4, for example, wherein one of said at least two cross openings is arranged in a central portion and said at least two cross openings have a lateral\*\* crosscut passing therethrough, as at 6 in Fig. 4, for example, and extending to an edge of said paper body 1; a weed-preventing agent, such as fungicide as at 16, contained\*\*\* in said paper body 1.

\*Re – paper body, and in response to the Applicant's argument that Mason includes additional structure not required by Applicant's invention, it must be noted that Mason discloses the invention as claimed. The fact that it discloses additional structure not claimed is irrelevant.

\*\*Re – 'lateral', the term means nothing more than 'to the side', which, while Mason does indeed disclose a series of concentric perforations 10, as at col. 2, lines 16 and 17, those

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perforations 10, being the size they are, are construed as being 'lateral' crosscuts in the sense that they pass through and 'to the sides' of cut 6 at various locations throughout the device, as best seen in Fig 4, for example.

\*\*\*Re – 'contained', Mason discloses the weed-preventing agent being contained in the paper body 1 by way of reference to using 'a water-soluble, ink-type formulation', as set forth at col. 2, lines 53 – 55 (2:53-55), for example. While not explicitly so stated, ink-type formulations are inherently 'contained' in a paper body as the ink spreads through the fibers of the paper body.

5. Re – claim 20, Mason discloses a control-release fertilizer to be dissolvable in water, 2:66-3:2, to provide nutrients.

6. Re – claim 22, Mason discloses the paper being made of a biodegradable fiber, see Abstract, for example.

***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1 and 3 – 8, 10 – 12, 14, 15 and 17 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mason in view of U.S. Patent No. 4,063,452 to Bradshaw.

9. Re – claims 1 and 17, Mason discloses the invention substantially as claimed as applied above.

However, Mason does not disclose a water indicator printed on said paper body and showing hydrous and anhydrous states thereof via different colors for being a reminder of watering.

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Bradshaw teaches a water indicator 16 printed on a body 12 and showing hydrous and anhydrous states thereof via different colors in the same field of endeavor for the purpose of monitoring available moisture to potted plants.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mason to include the water indicator as taught by Bradshaw in order to monitor available moisture to a plant.

10. Re – claims 3 and 18, Mason in view of Bradshaw discloses the claimed invention as applied above. Bradshaw further teaches a water indicator 16 containing a cobalt chloride ( $\text{CoCl}_2$ ), as at 3:9, in the same field of endeavor for the same purpose as described above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to further have the indicator 16 contain a cobalt chloride as taught by Bradshaw for the reasons set forth above.

11. Re – claims 4 and 19, Mason in view of Bradshaw discloses the claimed invention as applied above. Bradshaw further teaches the indicator 16 being printed on the body in a shape of a word or a figure, 8:37, for the same purpose as described above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mason to include the shape of a word or a figure as taught by Bradshaw for the reasons set forth above.

12. Re – claim 5, Mason in view of Bradshaw discloses the claimed invention as applied above. See rejection of claim 20 above.

13. Re – claim 6, Mason in view of Bradshaw discloses the claimed invention as applied above. Mason discloses the fertilizer being coated or adhered to the paper.

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14. Re – claim 7, see claim 4 above. Since Bradshaw teaches a dot or other shape, which would both be ‘figures’ as claimed, the claimed limitation has been met. Further, since beauty is in the eye of the beholder, whether a dot or other shape is ‘greatly beautifying’, is a judgment call at best and not a patentable limitation.

15. Re – claim 8, see claims 4 and 7 above. The figure of Mason appears to be selected from the group consisting of a flower, a grass, a person and a scenery.

16. Re – claim 10, Mason and Bradshaw both disclose applying the device to one of a potted plant and a fruit tree.

17. Re – claim 11, Mason and Bradshaw both disclose the body being circular.

18. Re – claim 12, Mason discloses the body having a diameter equal to that of one of a pot where the potted plant is grown and an under-canopy area of the fruit tree.

19. Re – claim 14, see rejection of claim 22 above.

20. Re – claim 15, Mason discloses the fiber being one of a plant fiber and a polymer fiber. It has long been accepted that cellulose is a long-chain polymer, which comes from tree pulp, which is a plant fiber.

21. Claims 9, 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mason in view of Bradshaw, further in view of US Patent No. 5,729,929 to Burke.

22. Re – claim 9, Mason in view of Bradshaw discloses the claimed invention, as applied above, except for a surface of the paper body has a silver color.

Burke teaches a surface of a body having a silver color in the same field of endeavor for the purpose of reflecting energy, as at 3:48-50, for example.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Mason in view of Bradshaw to have a surface of the body have a silver color as taught by Burke in order to reflect energy.

23. Re – claims 13 and 21, Mason in view of Bradshaw discloses the claimed invention, as applied above, except for the weed-preventing agent being one of inorganic and organic fillers being one selected from a group consisting of a black carbon, a silicon dioxide and a titanium dioxide.

Burke teaches such an agent, as at 4:30, 34, in the same field of endeavor for the purpose of achieving a temperature differential.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Mason in view of Bradshaw to have an agent be one of inorganic and organic fillers being one selected from a group consisting of a black carbon, a silicon dioxide and a titanium dioxide as taught by Burke in order to achieve a temperature differential.

### ***Conclusion***

Any inquiry concerning this communication should be directed to Bret Hayes at telephone number (571) 272 – 6902. The examiner can normally be reached Monday through Friday from 5:30 am to 2:00 pm, Eastern Standard Time.

On July 15, 2005, the Central FAX Number was changed to **571-273-8300**. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number. To give customers time to adjust to the new Central FAX

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Number, faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005. After September 15, 2005, the old number will no longer be in service and **571-273-8300** will be the only facsimile number recognized for "centralized delivery".

If attempts to contact the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu, can be reached at (571) 272 - 7045.

bh

20-Oct-05



TERI PHAM LUU  
SUPERVISORY  
PRIMARY EXAMINER